



SURFACING SYSTEMS

THE COBURN STORY

In January 2011, Gerber Coburn became Coburn Technologies; the world's leading, US based manufacturer of complete lens making goods and services for the industry. Once again an independent company focused exclusively on the ophthalmic market. Built on the company founded in 1954, the Coburn commitment is to provide you with unmatched service and support for the equipment and supplies for your lab.

A History of Innovation and Trust

For over 60 years the Coburn name has supplied optical labs with products and services that have literally invented the lab-production methods we use today. With over 15,000 systems installed worldwide and more than 7,000 customers in 75 countries you can count on Coburn Technologies for solid application support, field service, and a global distribution network to respond to questions and concerns. Going forward Coburn is again reinventing lens processing systems that address the most critical future needs of your business and our precious natural resources.

Greater Profit for Our Customers

Coburn is passionate about the success of its customers. Our internal development resources have a renewed focus on innovating new optical lab products, establishing new global partnerships to introduce new technology, and acquiring new capabilities to deliver an expanded offering of higher quality products. All of these efforts are aimed at improving the lens production in your lab, while making the lens making process easier, faster and more affordable to provide you the tools you need to make greater profits in your lab.

Everything Labs Need

Whether it's consumables and supplies, eco-friendly lens processing, building a digital lab, or servicing your equipment, Coburn Technologies will be there. We will continue to serve our customers globally with the best possible products, technologies, and services while providing uncompromising value and support. We've listened to our customers, and by working with them we will continue to reach new milestones.

Serving retail outlets, eye care professionals and lens production labs,



Alex Incera
President



THE COMPLETE PACKAGE

SURFACING • FINISHING • SUPPLIES

Coburn is the world leading US based manufacturer of complete ophthalmic lens processing systems which includes designing, manufacturing, and servicing the equipment and supplies used in all aspects ophthalmic production; from surfacing prescriptions, to coating and finishing lenses to fit into patient frames. This means all equipment and supplies are designed, tested and guaranteed to work together for optimum performance and available from one convenient source; Coburn.



PUTTING IT ALL TOGETHER

SERVICE • SUPPORT • COMMITMENT

Customers can count on solid application support, field service, specialized product groups, worldwide distribution and a dedicated support network to respond to their questions and concerns faster and with a greater depth of product knowledge. Coburn's Technical Support routinely installs, trains, services and troubleshoots new and existing equipment installations, and is strategically located around the world to support customers faster no matter where they're located. Coburn is committed to your complete satisfaction.



MORE CUSTOMER PROFITABILITY

QUALITY • EXPERTISE • VALUE

How can doing business with Coburn increase your bottom line? With access to experienced lens making specialists to assess exactly what your lab needs and the ability to bundle all of your equipment and supplies from one source. Coburn not only saves you money every month, but with higher quality products and one of the fastest global support teams in the industry, we can increase your up-time in production, lower your supplies costs, reduce your breakage and create greater production efficacy.

E2G WITH ONYX-BOND™

SURFACE BLOCKER SYSTEM

"A great complete blocking package that is an affordable choice for a lab that wants to move into digital surfacing"

E2G user from Harrisburg, PA



Designed for free-form digital, and traditional lens processing, the E2G eliminates the need for alloy by using a reusable, machinable, and environmentally safe blocking material. Based upon the proven technology of the Eclipse platform, featuring one-touch blocking, automatic block and lens detection, full diameter blocking, along with other user-friendly features including superior lens quality with a lower total cost of ownership.

- System includes surface blocker, scallop surface blocks, blocking compound and deblocker
- One-touch blocking simplifies blocking from layout to chilling
- Multi-block options for use of standard pin, Acublock and small diameter blocks
- Automatic Block and Lens Detection system alerts the user if a lens or block is not detected
- Full Diameter blocking provides maximum support and stability during generating, eliminating lens edge chatter and form errors associated with non-supported areas
- Posi-fil™ system delivers Onyx-Bond quickly and evenly during the blocking process
- Interactive Material Pre-Melter automatically activates and deactivates providing the correct amount of liquefied blocking material for continued operations
- Internal front camera with 17" view screen provides "parallax-free" viewing

ONYX-BOND™

A new lightweight blocking material used for all conventional and digital (free-form) processing that eliminates the harmful effects of alloy and eliminate EPA issues associated with alloy contamination while removing lens cleanup and residue issues attributed to wax and alloy materials. Once deblocked, the material is placed back into the E2G pre-melter, where it is remelted and ready for continued blocking. Non-Toxic with no lead, cadmium, or indium and requires no waste water management.

ECLIPSE LX WITH FREEBOND™

SURFACE BLOCKER SYSTEM



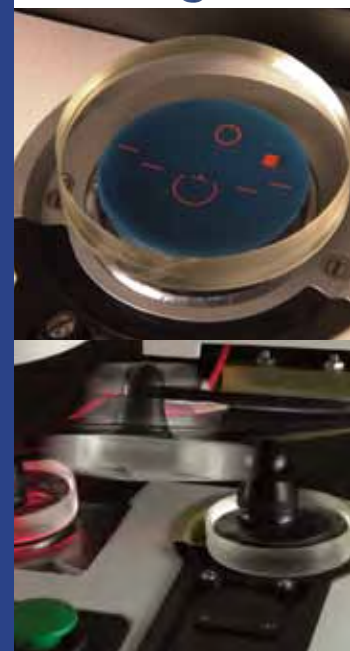
Offers a complete and consolidated easy to use surface blocking process with automatic one-touch operation

An economical system that offers standard layout and blocking features, along with advanced blocking applications that will enhance any ophthalmic laboratory. With its automatic one-touch blocking feature, operators block and chill the lens in one simple step, consolidating the surface blocking process, while increasing throughput. Utilizes patented FreeBond compound for environmentally-friendly, alloy-free blocking.

- One-touch blocking simplifies blocking from layout to chilling. Positioning on the blocking ring, 180° axis alignment, and block rotation to the cylinder axis are automatic
- Multi-block options for use of standard pin, Acublock and small diameter blocks
- Automatic Block and Lens Detection system alerts the user if a lens or block is not detected
- Automatic material fill with overflow sensors automatically fills the blocking chamber providing the correct amount of liquefied blocking material allowing the operator to position the next lens for alignment or for batch processing
- Internal front camera with 10" view screen provides "parallax-free" viewing for precise lens-to-target alignment by eliminating through-power distortion of images

FREEBOND™

Proprietary, thermoplastic material eliminates alloy use, reclaim, and waste management. Formulated to remove health hazards and environmental risks in surface blocking. FreeBond's low melting, blocking temperature, and density results in cooler lens processing and fewer aberrations. Once deblocked, the material is placed back into the Eclipse premelter, where it is remelted and ready for continued blocking. Non-Toxic with no lead, cadmium, or indium and requires no waste water management.



COBALT^{LTE}

COLD-MIST COMPACT GENERATOR

“A smaller way to process free-form with an expandable product platform that can grow with your business”

MINI FREE-FORM SYSTEM



The COBALT^{LTE} lens generator is the latest innovation in the COBALT line of surfacing products which features Coburn's proven mist-cut generating technology for high quality surface finish. This new platform has a space efficient footprint that does not require water management equipment, making it ideal for small to medium-sized labs eager to upgrade their in-house capabilities to offer free-form.

- Processes both traditional & digital free-form lenses types
- “Cold-Mist” technology provides an equivalent surface finish to wet-cut generating without the need for a water management system
- Smaller footprint, requiring only approximately 20 sq/ft of lab space including its external vacuum
- Coburn's patented and globally licensed single-point diamond turning lathe technology
- Precision air bearings and robust granite base provide improved stability and less sensitivity to external vibration for higher quality output and increased cutting accuracy

COBALT^{LT}

The Cobalt-LT base model is a fast entry-level lathe generator for traditional Rx lens. Designed with expansion in mind, the Cobalt-LT is ready to be upgraded to digital free-form processing, making it a lower cost solution that grows with your business.

COBALT^{LTE}

The Cobalt-LTE model adds the advanced “Cold-Mist” digital free-form lens processing right from the factory. Lens can be processed using Coburn's LaunchPad technology or Cobalt-DP digital polisher for a complete free-form system.



LAUNCHPAD™

FREE-FORM PROCESS



Marks a new era in free-form lens processing by giving you the capability to scale your free-form production easier than ever before

Makes free-form polishing possible on a traditional cylinder machine

MINI FREE-FORM SYSTEM

- Acuity Plus cylinder machine
(see page 12)

LaunchPad™ is the name for the innovative free-form processing technology that allows for easier and more cost-effective polishing of free-form lenses. The proprietary, patent-pending material configuration of LaunchPad combined with Coburn's patented disposable foam lap allows for free-form polishing on a traditional cylinder machine* eliminating the need for larger free-form polishers. It is now possible for anyone to enter the world of free-form lens processing without being barred by the prohibitive start-up cost. LaunchPad gives you the capability to scale free-form from retail to wholesale easier than ever before.

- Simplifies the process of producing free-form lenses to work on smaller equipment
- Provides an affordable opportunity to process free-form lenses with reduced start-up equipment costs
- Custom and exact free-form curvature through the patented Coburn disposable lap technology
- Scientifically designed, developed and tested specifically for Coburn free-form generators and cylinder machines including *Acuity Plus* and *CMX50* products



COBALT^{DS}

COLD-MIST LENS GENERATOR

*Better surface results
than competitive
dry-cut and wet-cut
processes without any
water management*

FEATURED FREE-FORM SYSTEM



COBALT SURFACING SYSTEM

A new matched set of lens generating and polishing technologies exclusively from Coburn that leaves the final polished lens optically clear without the need to apply hard coating for optical clarity, and produces better cut and polished free-form lens results than any other digital surfacing system with a smaller footprint and price-point than all others in its class.

- Quickly processes both traditional & digital free-form lenses types
- Complete system including generator, polisher, and polish chiller is up to 50% smaller footprint than competitive free-form systems due to the elimination of the water management systems required with traditional wet-cut generators
- Unique technology requires no water filtration or treatment chemicals for lens waste removal
- User friendly touch screens and graphical interface make processing easy for all operator skill levels
- Combine either Cobalt unit with another comparable and compatible generator or polisher to fit seamlessly into your existing lab workflow

Cold-Mist Technology

Atomizes a water-based lubricant directly at the cutting diamond which saturates the lens surface and creates a “wet core” for the cut, but evaporates completely after it leaves the chamber, resulting in a lens surface equivalent to competitive wet-cut generators without the need for water management.

IVC Lap Technology

Utilizes advanced physics of soft-tool products with unique 4 Axis motion control so that only three tools are required, which radically simplifies and improves the overall polishing process in the lab.



COBALT^{DP}

SOFT-TOOL LENS POLISHER



"These look like polished lenses should look: they are clear, I can read them and see everything I need to in the surface"

"If there is an issue I can catch it before I waste the money and time coating them"

FEATURED FREE-FORM SYSTEM

COBALT^{DS} LENS GENERATOR

- "Cold-Mist" Cutting System which provides wet-cut generating results without need for a water management system
- Utilizes Coburn's patented and globally licensed single-point diamond turning lathe technology
- Precision air bearings for increased cutting accuracy and through-put speed
- Dual Axis-cutting for reduced processing times
- Vibration dampening system that isolates lens cutting environment from any external vibration
- Optional Crib-to-Oval cutting feature for non-circular lens requirements

COBALT^{DP} LENS POLISHER

- Haze-free polishing process leaves lenses crystal clear after polishing so coating is not required to obtain optical clarity
- Only 2 soft tool laps needed for polishing widest lens curve range
- 80% of range accomplished with just 1 lap
- Variable axis controls allow for more precision and customizable control of polishing process
- Manual rinse station with foot peddle operation
- Isolated polishing chambers allow for polishing two one-eye jobs, of different materials, at the same time



CTL SERIES

DRY-CUT LENS GENERATOR

All the benefits of advanced dry-cut, cut-to-polish lens processing that you have come to expect from Coburn in a compact footprint



A compact turning lathe which utilizes Coburn's patented single-point technology to produce conventional lenses for small to mid-size laboratories. Semi-finished lens blanks are surfaced, cribbed, and safety beveled in a fast and accurate process using a multi-data system to reduce lens spoilage while optimizing lens and lap cycle times without the need for an expensive water reclaiming filtration system.

The CTL65 is the fastest traditional Rx lens generator in its class. An entry-level lathe generator that cannot be upgraded to process free-form, however it is an ideal fit for labs familiar with the popular Coburn SL2 series of generators.

- Patented, single-point precision turning technology for standard & advanced lens processing
- Dry-cut generating technology means no more water filtration systems for lens waste removal, water treatment chemicals or lens coolants, and smaller operating footprint in lab space
- Smooth surface finish guarantees consistent one-step fining across the range of lenses
- Interrupted polycarbonate lens cutting feature for smaller polycarbonate lens strands
- Stiff & robust granite base provides improved stability and less sensitivity to external vibration for higher quality output
- Faster processing times and increased throughput over the popular SL2 generator
- Large touch screen operation makes for easy navigation
- Optional Crib-to-Oval cutting feature for non-circular lens requirements

SGX PLUS™

TABLETOP LENS GENERATOR



The latest version of the compact and intelligent Coburn SG series, with proven performance for progressive labs

This tabletop, entry-level surface generator provides proven, high-performance dry-cut milling technology for processing CR-39®, hi-index, and polycarbonate lenses. Compact and intelligent, the SGX Plus processes lenses totally free of elliptical error and provides a low-stress means of generating exact prescription curves while creating less mess in the lab.

- Precise 3-axis machining generates consistently accurate prescription curves
- Reduces total surfacing time by shortening fining and polishing cycles and enabling consistent single-step fining of most lens materials
- Curves for virtually every ophthalmic prescription are cut without prism marking, blocking or rings, making it easier for the operator to manage each job
- Dry-cut generating technology means no water filtration systems for lens waste removal, water treatment chemicals or lens coolants, and smaller operating footprint in lab space
- Small Diameter Lens Cribbing capability reduces lens diameters and removes thin edge material, minimizing surfacing time and the potential for chipping
- 50/60 Hz brushless motor eliminates routine brush replacement and maintenance
- RETRUE mode allows labs to recut lap tools thereby maintaining the overall finish and curve quality of the lap inventory
- SPECIALS function prevents edge chipping when processing progressives, executives, aspherics, and knife-edge lenses
- Link to lens layout software for automatic transfer of surfacing data and handling of job storage. Job numbers can be entered via a bar code reader or using the keyboard



ACUITY™ PLUS

FINER / POLISHER

A sophisticated yet user-friendly and highly economical workhorse machine for exceptionally accurate lenses for all material types



The innovative Acuity Plus easily handles a wide curve range, producing consistently excellent results via a one- or two-step fining process. Such versatility is achieved without stroke adjustments. In addition, its unique ergonomic design exceeds the industry standard, making it exceptionally fast and efficient. Plus, clean, modern styling, compact size, and quiet operation make it ideal for any lens processing environment.

- Processes CR-39®, polycarbonate, hi-index, and glass
- Push button operation affords quick, easy calibration
- FasStart™ feature automatically clamps the laps and lenses in place when engaged to speed cycle times
- Heavy-duty rod end bearings decrease maintenance costs while affording improved reliability
- The optional compliant adapter eliminates traditional fining pins, allowing faster lens loading while reducing maintenance costs
- Enhanced fluid delivery system provides increased clearance for lap and lens, allowing faster loading and unloading. It also increases the coolant/slurry rate, which increases productivity by reducing processing times and minimizing lens re-work
- Control display designed to guide operators through each step of the fining and polishing process, and can be customized to accommodate each lab's special needs

SIMPLICITY

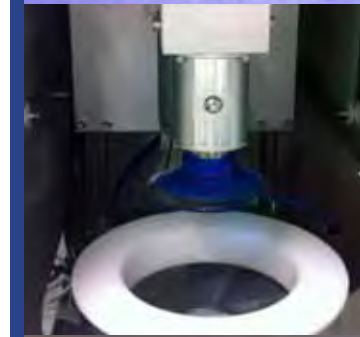
UV HARD COATING SYSTEM



*Compact and automatic
all-in-one lens coating
that's as simple as push-
ing a button*

Built using award-winning technology, the Simplicity coater combines a wash station, coating station and UV cure station in one fully enclosed counter-top design. Its size and automated functionality make it an ideal fit for small to medium sized labs looking to bring lens coating in house, and its programmable control over the coating process makes it ideal for tinting and other specialty applications in larger labs.

- Compact 3-in-1 unit combines wash station, coating station and UV cure station
- Small footprint is perfect for limited spaces
- Fully enclosed coater to prevent debris in the air from getting onto the lens
- User friendly Touch Screen with simple controls and adjustments
- Superb adhesion to all substrates including CR-39, Polycarbonate, Trivex, Spectralite, 1.56, and High Index
- Programmable controller with multiple recipes for faster, easier coating changes
- Can easily check parameters and spindle speeds on screen for maximum control of the coating process
- Removable coating module that allows for much easier cleaning, maintenance and switching between coatings
- Utilizes Coburn coatings optimized with HCLT (Hybrid Cross Linking Technology) UV/thermal hybrid chemistry which features excellent adhesion, low viscosity, and higher yields



VACUUM SYSTEMS

LENS WASTE MANAGEMENT

“All you need with your Coburn lens generator is a good vacuum that will quickly and effortlessly remove the lens waste from the cutting chamber, because the material stays dry and can be thrown out in the normal trash without contamination”

GC-IV GRANULATOR SYSTEM

The GC-IV Granulator and Poly-Swarf Management System delivers superior granulating capabilities, cutting the polycarbonate lens waste into manageable strands reducing frequent bag changes and downtime. The cast iron construction and easy interior access withstands the demands of the wholesale lab environment.

- Superior 180 degree granulation screen for cutting waste strands down to 1/4" pieces
- Angled rotating fly knives provide shock-free shear cuts
- Open box rotor to increase vacuum flow
- Exclusive shaftless cutting chamber
- Use as a stand alone unit or with select vacuums



GC-IV GRANULATOR SYSTEM

VELOCITY VACUUM

Specifically offered for use with your tabletop generator, this vacuum design offers superior lens waste management with high performance brushless collection and dust filtration down to 0.3 microns. The optional integrated cabinet allows you to maintain a minimum footprint in your lab space.

- Recommended for tabletop lens generators (such as SGX series)

AERO VACUUM (NOT SHOWN)

An larger version of the popular Velocity, this vacuum offers 4x more collection capacity with the same superior high performance flow and filtration.

- Recommended for compact lens generators (such as Cobalt^{LTE} and CTL series)

DISA GC 1000 VACUUM

Provides over 1,000 CFM for proper volume of air to eliminate lens waste clogs in a high-production lab environment. With its large 40 gallon waste bin and automatic bag shaker, this vacuum can handle multiple generators.

- Recommended for high volume generators (such as Cobalt^{DS} and DTL series)



VELOCITY VACUUM

EURO KLEENCHILL™

POLISH MANAGEMENT

An essential tool for every lab concerned with quality polish management and overall system cost effectiveness



ECO 6

- Optimum chill level management >45°F (7°C)
- Compact size for smaller footprint
- Average payback less than 6 months
- Polish tank: 6 Gallons (23 Liters)

LP 8/10 SPINDLE (SHOWN BELOW)

- Optimum chill level management >50°F (10°C)
- Reduced ambient temp. via remote heat sink
- Saves money on supply costs, including initial purchase cost
- Polish tank: 10.5, 13 or 16.5 Gallons (40, 50 or 62 Liters)

The KLEENCHILL series offers a wide range of fluid management systems addressing all aspects, from filtration to chilling, for all prescription laboratory machinery. Not only do these systems bring substantial economic and production benefits but also address environmental protection needs. The polish management and economic benefits of these systems make it an essential tool for every laboratory concerned with quality system management and cost effectiveness.

- Optimizes polishing quality
- Extends polish life up to 12 months while ensuring quality performance
- Suitable for all high quality lens polishes
- Filtration system removes waste matter and debris which would normally inhibit polish life and performance
- Reduces polish change man-hours and waste disposal by 50%
- Centralized system and flow management systems ensure optimum polish condition and Baume control
- Closed system greatly reduces risk of polish contamination
- All polish contact components are acid resistant, stainless steel or special plastics
- Optimizes cleanliness due to greatly reducing polish change activity
- Filter medium reusable, simply flush clean with water
- Additional configurations and sizes available upon request



Technical characteristics

Blockers:

	E2G	ECLIPSE	COATERS:
POWER	230v, 50/60 Hz, single phase, 10 Amp	115v, 50/60 Hz, single phase, 10 Amp 230v, 50/60 Hz, single phase, 5 Amp	110v, 50/60 Hz, single phase, 15 Amp
DIMENSIONS	30" w x 27" d x 30.5" h 762 mm x 686 mm x 768 mm	30" w x 27" d x 27" h 762 mm x 686 mm x 686 mm	27" w x 28" d x 29" h 686 mm x 711 mm x 737 mm
WEIGHT	125 lbs / 57 kg	125 lbs / 57 kg	350 lbs / 159 kg
PRODUCT DETAILS	Air Required: 100 psi @ 3 CFM Uses ONYX-BOND blocking compound Includes external chiller and pump	Air Required: 80 psi @ 3 CFM Uses FREEBOND blocking compound Includes external chiller and pump	Air Required: 80-100 psi @ 2 CFM Uses Coburn's series of HCLT UV/thermal coatings

Generators:

	COBALT-DS	COBALT-LTE	CTL 65	SGX PLUS
POWER	380-400v, 3 Phase, 30A (Transformer for 3 Phase 230V)	230v, 50/60 Hz, single phase, 10 Amps	230v, 50/60 Hz, single phase, 20 Amps	230v, 50/60 Hz, 5 Amps
DIMENSIONS	60" w x 40" d x 60" h 1525 mm x 1020 mm x 1525 mm	47" w x 38" d x 59" h 1194 mm x 965 mm x 1498 mm	47" w x 31" d x 51" h 1194 mm x 787 mm x 1295 mm	30" w x 28" d x 31" h 762 mm x 711 mm x 788 mm
WEIGHT	2400 lbs / 1090 kg	1,400 lbs / 635 kg	1,200 lbs / 544 kg	165 lbs / 75 kg
PRODUCT DETAILS	Air Required: 100 -120 psi @ 8 CFM Base Curve: +7 to -20 diopters Cylinder: 10 diopters Prism: 10 diopters	Air Required: 80 -100 psi @ 10 CFM Base Curve: +7 to -20 diopters Cylinder: 10 diopters Prism: 10 diopters	Air Required: 80 -100 psi @ 10 CFM Base Curve: +7 to -20 diopters Cylinder: 10 diopters Prism: 10 diopters	Air Required: 90 psi @ 5 CFM Base Curve: +8 to -30 diopters Cross Curve: 10 diopters Prism: 10 diopters

Vacuums:

	GC-IV GRANULATOR	DISA GC 1000 VACUUM	AERO VACUUM	VELOCITY VACUUM
POWER	230v, 50/60 Hz, single phase	230v, 50/60 Hz, single phase	230v, 50/60 Hz, single phase	115v, 50/60 Hz, single phase 230v, 50/60 Hz, single phase
DIMENSIONS	33" w x 22" d x 12" h 383 mm x 559 mm x 59 mm	33" w x 29.5" d x 86.5" h 383 mm x 750 mm x 2197 mm Bin = 40 gal / 176 liters	32" w x 31" d x 36" h 813 mm x 787 mm x 915 mm Bin = 36 gal / 159 liters	38.5" w x 31.5" d x 34" h 978 mm x 800 mm x 864 mm Bin = 8 gal / 35 liters
WEIGHT	150 lbs / 67.5 kg	350 lbs / 158 kg	120 lbs / 54 kg	65-120 lbs / 30-54 kg (without cabinet)

Polishers & Chillers:

	COBALT-DP	ACUITY PLUS	KLEENCHILL ECO 6	KLEENCHILL LP 8/10
POWER	230v, 50/60 Hz, single phase, 10 Amps	230v, 50/60 Hz, single phase, 7.5 Amps 380v, 50 Hz, three phase, 7.5 Amps	208v - 240v, 50/60 Hz, single phase	220v - 240v, 50/60 Hz single phase
DIMENSIONS	40" w x 40" d x 71" h 1020 mm x 1020 mm x 1810 mm	18" w x 29" d x 54" h 450 mm x 725 mm x 1350 mm	29" w x 31" d x 26" h 730 mm x 800 mm x 660 mm	56" w x 28" d x 44" h 1420 mm x 720 mm x 1110 mm
WEIGHT	1000 lbs / 455 kg	250 lbs / 114 kg	110 lbs / 50 kg	320 lbs / 145 kg
PRODUCT DETAILS	Air Required: 85 -145 psi @ 10 CFM Base Curve: 0 to -14 diopters Cylinder: 6 diopters Prism: 6 diopters	Air Required: 50 -125 psi @ 1 CFM Base Curve: 0 to 20 diopters Cylinder: 10 diopters Prism: 10 diopters	6 gal / 23 liters	10.5 gal / 40 liters 13.0 gal / 50 liters 16.5 gal / 62 liters



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